The National Children's Study
Environmental Effects on Child Health and Development

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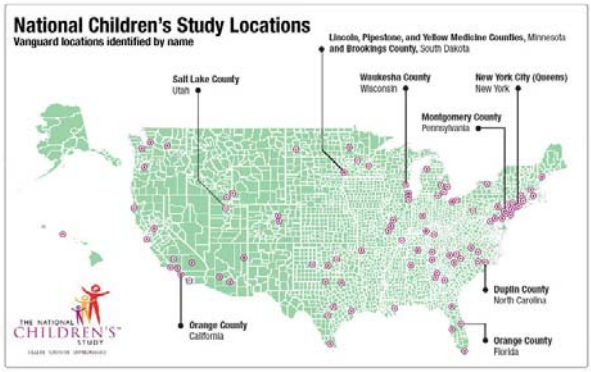
What is the National Children's Study (NCS)?

The National Children's Study is a population-based cohort study that will examine the effects of environmental influences on the health and development of approximately 100,000 children across the United States, following them from before birth until age 21. The goal of the study is to improve the health and well-being of children.

The study defines "environment" broadly and will take a number of issues into account, including:

- Natural and man-made environment factors
- Biological, chemical and physical factors
- Physical surroundings
- Social factors
- Behavioral influences and outcomes
- Genetics
- Cultural and family influences and differences
- Geographic locations



NCS is an Interagency Federal Effort with Significant Input from Non-Federal Partners

The NCS grew out of the **President's Task Force on Environmental Health Risks and Safety Risks to Children**, and was authorized in the **Children's Health Act of 2000**. The Children's Health Act directed The National Institute of Child Health and Human Development (NICHD) to conduct the study along with a consortium of federal agencies, including the Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention (CDC) and the National Institute of Environmental Health Sciences (NIEHS).

A Federal Advisory Committee for National Children's Study has been in place since 2002 and hundreds of non-Federal scientists, community leaders, environmental and public health professionals, and child health advocates have contributed their expertise to planning the study.

Current NCS Activities

Protocol development is well underway including pilot studies, such as:

- Population-based pilot of sampling, recruitment and retention led by EPA
- Methods development studies focused on:
  - data collection procedures
  - biological markers
  - questionnaires
  - environmental information

Coordinating Center and Vanguard Study Centers will be awarded late summer 2005.

The NCS Study Plan and details on the national probability sample are available on our website.

What will the NCS do?

This cohort Study will follow a representative sample of approximately 100,000 children born in the United States. Children will be followed from before birth until 21 years of age. The size and longitudinal design of the Study will provide a database to answer many questions about the effects of children's exposures to environmental contaminants, including those where only a small percentage of the population experiences an effect, and to detect combined effects of low-level exposures at different life-stages.

Evaluate the impact of environmental factors on child health and development across life stages:

Pregnancy outcomes
Growth and neurobehavioral development
Asthma
Obesity and physical development
Injuries

Researchers will analyze how broadly defined environmental (social, physical, and chemical) and genetic factors interact with each other, and what helpful and/or harmful effects they might have on children's health. By studying children through their different phases of growth and development, researchers will be better able to understand the role of these factors on health and disease. The NCS will enroll prospective parents as early as possible in pregnancy, including some before pregnancy, and will follow their children into adulthood (approximately 21 years of age).

Address important public health questions:

What is the contribution of environmental exposures to child health and development?

Are there long-term health effects from early life exposures?

Are certain population subgroups more susceptible to environmental contaminants than others, and which factors alter susceptibility (e.g., specific genetic polymorphisms, immune deficiencies)?

What factors account for disparities in health outcomes (e.g., race, ethnicity, poverty, environmental quality, housing, income, nutrition)?

What are the effects of aggregate or cumulative exposures?

Are uncertainty factors and defaults in risk assessment sufficient to protect children's health?

Background information is available at **www.NationalChildrensStudy.gov**
For questions or further information about the National Children's Study, please send an email to: **ncs@mail.nih.gov**